

ABSTRACT

CREATIVE PROJECT: The Fort Wayne Stormwater Park: Improving Water Quality With Ecological Stormwater Management

STUDENT: Chad Shaw

DEGREE: Master of Landscape Architecture

COLLEGE: Architecture and Planning

DATE: May, 2009

PAGES: 109

This study reveals the conclusions necessary in determining the best possible design solutions for ecological stormwater management in Ft. Wayne, IN. Standard stormwater management methods present several negative environmental impacts; Ft. Wayne's system presents no exception. This problem characterizes the basic challenge of the study; discovered through its completion are the best possible solutions to offset the negative environmental impacts of currently used standard stormwater management methods on a specific site.

The study has been carried out in two phases. The first introduces the concepts of both standard and ecological stormwater management methods and their environmental impacts. Also described in this phase is the need for change in Fort Wayne's existing stormwater infrastructure.

The second phase is primarily design-based. Inventory of the determined site's sub-watershed is described. Analysis of the relationship between the described stormwater management methods, their impacts and site inventory serves as the crux of

this phase; its description reveals the best possible stormwater management solutions for the site. The master plan for the Fort Wayne Stormwater Park illustrates these solutions. The plan is based upon two primary goals—to decrease the negative environmental impacts of the currently used system on receiving waters and to increase the social and environmental value of the site.